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CANNIBALISM IN CAPTIVE RATTLESNAKES

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On September 15, 1968, I received five newly "born" prairie rattlesnakes (*Crotalus viridis viridis*) that had been captured near Lewistown, Mont. The rattlers were placed in a relatively large glass terrarium (30 inches by 12 inches) to facilitate behavioral observations. I fed them dismembered field mice (the rattlers were too small to eat mature mice) approximately every eight or nine days. For the first few feedings the rattlers were allowed to kill the mice that were to be dismembered, later the pieces of mice were put directly into the cage. Those snakes that did not adapt to feeding in this manner were killed and preserved; those that were feeding regularly were kept in captivity for five months. Near the end of the fifth month of captivity (February 13, 1969) one of the more aggressive rattlers swallowed one of his cage-mates, of approximately the same size, tail first. The snake that was swallowed was apparently dead, or near death, when the process of engulfing commenced; when the cannibalistic act was noticed, the snake being eaten was swallowed except for its head and neck and was not struggling (Fig. 1).

The swallower was kept under close observation and on February 20, one week later, the swallowed snake was regurgitated. Shortly afterward, another snake in the terrarium swallowed the regurgitated bolus but regurgitated it almost immediately. The original feeding rattler then swallowed the bolus once again and finished the digestive process.

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Fig. 1. A juvenile prairie rattlesnake (*Crotalus viridis*) swallowing a cagemate of approximately the same size, tail first.

Although cannibalism in captive and naturally occurring rattlers has been reported on several occasions, it is rare and usually takes place only under certain conditions. Klauber (1956, *Rattlesnakes*, Univ. Calif. Press, Vol. 1) states that cannibalism in rattlers usually occurs through the unnatural conditions of captivity: the result of snakes starting to eat the same prey simultaneously and one snake getting its upper jaw over the edge of the cagemate's, or when rattlers are crowded and hungry. He also reports that rattlers have been known to eat dead snakes of their own species.

Regurgitation is not uncommon in captive rattlers that are forced, fed a meal too large, or just fed food that does not agree with them (Klauber, 1956). The inference is, however, that this phenomenon usually occurs shortly after or during the swallowing process and not a week later.

As to the manner in which rattlers swallow their prey, it is usually accomplished in a head-first fashion (Klauber, 1956). It is the combination of this rather rare method of engulfing prey with the fact that the rattlers had been feeding fairly regularly and were not overly crowded that makes this particular cannibalistic observation and photograph of interest.